

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
)
Eugene FINK et al.)
)
Serial No.: Filed Concurrently Herewith) Group Art Unit: Unassigned
)
Filed: Filed Concurrently Herewith) Examiner: Unassigned
)
For: METHOD AND SYSTEM FOR)
MULTI-DIMENSIONAL TRADING)

Commissioner for Patents
Washington, D.C. 20231

DECLARATION FOR PATENT APPLICATION

Sir:

As a below-named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.


I believe I am an original, first, and joint inventor of the subject matter that is claimed and for which a patent is sought on the invention entitled **Method and System for Multi-Dimensional Trading**, the specification of which is being filed concurrently herewith.

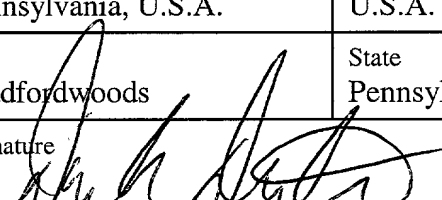
I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

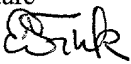
I hereby declare that all statements made herein of my knowledge are true and that all statements made of information and belief are believed to be true; and further that these statements were made with a knowledge that willful false statements in like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

INVENTOR 1		
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Date	Signature	

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Date Dec 4 '00	Signature 	

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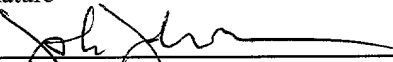
INVENTOR 3

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Date	Signature	

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INVENTOR 6		
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Post Office Address 6501 Bartlett Street	City Pittsburgh	State Pennsylvania 15213
Date	Signature	

PATENT
ATTORNEY DOCKET NO.: 051672-5001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
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Eugene FINK et al.)	
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Serial No.: Filed Concurrently Herewith)	Group Art Unit: Unassigned
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Filed: Filed Concurrently Herewith)	Examiner: Unassigned
)	
For: METHOD AND SYSTEM FOR)	
MULTI-DIMENSIONAL TRADING)	

Commissioner for Patents
 Washington, D.C. 20231

Sir:

POWER OF ATTORNEY BY ASSIGNEE

The undersigned Assignee of the entire interest in the above-identified application hereby grants power of attorney to the registered practitioners of Morgan, Lewis & Bockius LLP included in the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed to:

Customer Number 009629
 Patent Support Unit
 Morgan, Lewis & Bockius LLP
 1800 M Street, N.W.
 Washington, D.C. 20036-5869
 202-467-7176 (facsimile)

Please direct all telephone calls to Lesley L. Coulson at 202-467-7053.

ATTORNEY DOCKET NO.: 051672-5001

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CERTIFICATE UNDER 37 C.F.R. § 3.73(b)

Powerloom, a United States corporation, certifies that it is:

1. ☒ an assignee of the entire right, title, and interest; or
2. ☐ an assignee of an undivided part interest

in the application identified above by virtue of:

- A. An assignment from the inventor(s) of the application identified above. The assignment was recorded as follows:

FROM	TO	REEL/FRAME NO.
		Reel: Frame:

OR

- B. A chain of title from the inventors, of the application identified above, to the current assignee as shown below:

1. From: Eugene FINK, Ganesh MANI, Dwight E. DIETRICH, Joshua M. JOHNSON, Steven V. FISCHETTI, and Jaime G. CARBONELL
To: Powerloom
The document was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

☒ Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the Assignee.

Powerloom
One Gateway Center, Suite 425
Pittsburgh, PA 15222

Dated: 12/18/00By: 

Ganesh MANI
Co - CEO

STATEMENT CLAIMING SMALL ENTITY STATUS
37 C.F.R. §§ 1.9(f) and 1.27(c)-SMALL BUSINESS CONCERN

Applicant or Patentee: Eugene FINK et al.
Application or Patent No.: Filed Concurrently
Filed or Issued: Filed Concurrently
Title: METHOD AND SYSTEM FOR MULTI-DIMENSIONAL TRADING

I hereby state that I am

- ☐ the owner of the small business concern identified below:
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF CONCERN: Powerloom

ADDRESS OF CONCERN: One Gateway Center, Suite 425, Pittsburgh, PA 15222

I hereby state that the above-identified small business concern qualifies as a small business concern as defined in 37 C.F.R. § 121, and reproduced in 37 C.F.R. § 1.9(d), for purposes of paying reduced fees to the United States Patent and Trademark Office, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby state that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled METHOD AND SYSTEM FOR MULTI-DIMENSIONAL TRADING

described in: ☒ the specification filed herewith with the title as listed above.
☐ the application identified above.
☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights in the invention is listed below and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 C.F.R. § 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 C.F.R. § 1.9(d) or a nonprofit organization under 37 C.F.R. § 1.9(e).

NAME:		
ADDRESS:		
<input type="checkbox"/> INDIVIDUAL	<input type="checkbox"/> SMALL BUSINESS CONCERN	<input type="checkbox"/> NON PROFIT ORGANIZATION
NAME:		
ADDRESS:		
<input type="checkbox"/> INDIVIDUAL	<input type="checkbox"/> SMALL BUSINESS CONCERN	<input type="checkbox"/> NON PROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small business entity is no longer appropriate. (37 C.F.R. § 1.28(b)).

NAME OF PERSON SIGNING: Ganesh Mani

TITLE OF PERSON IF OTHER THAN OWNER: Co-CEO

ADDRESS OF PERSON SIGNING: 5545 Forbes Avenue, Unit G, Pittsburgh, PA 15217

SIGNATURE

DATE _____

Dec 5 '00

Figure 1 consists of 12 histograms arranged in a single column. Each histogram represents the distribution of the number of non-zero elements in the vector x for a specific value of n , ranging from 1 to 12. The x-axis for all histograms is labeled 'Number of non-zero elements' and ranges from 0 to 12. The y-axis is labeled 'Frequency' and ranges from 0 to 12. The histograms show that as n increases, the distribution of non-zero elements shifts to the right, with the peak frequency increasing and the range of non-zero elements expanding.